

Misunderstanding Puts Safety Record In Jeopardy; AEC Will Give Ruling

The status of Sandia Laboratory's safety record depends on a ruling from the Atomic Energy Commission's Health and Safety Division. The record had reached 14,936,169 employee-hours worked without a disabling injury when a statistically questionable case entered the picture.

Here is the story:

On Sept. 6, an electrician at Salton Sea Test Base was descending a powerline pole when he struck his knee against an insulator. A bruise resulted.

There is not a resident physician at Salton Sea and injuries requiring the attention of a physican are referred to a doctor some distance from the Base. The employee was referred to that doctor who advised him to go home and rest his leg and do a minimum of walking and standing. The employee went directly home as the doctor instructed and was absent from work for three days.

The attending physician later advised that the employee could have worked at a regularly established job which did not require much walking and standing. He had been sent home due to a misunderstanding as to the availability of such a job. The doctor's report concludes with the sentence that "Hence, the minor injury of Sept. 6, 1960, need not have resulted in loss of time from work."

Under the American Standards Association Code, if, in the opinion of a doctor, an injured employee is able to perform work within the restrictions set by the doctor, the case shall not be counted statistically as a disabling injury.

Acceptance or rejection of a case statistically does not determine whether an employee will be paid for absence due to injury. The A.S.A. Code determines only whether an injury will be counted statistically. This is a standard practice throughout the country.

Since time was actually lost, even though due to a misunderstanding, the case had to be referred to AEC for a final ruling. While there is every reason to believe that Sandia's record remains intact, the decision of AEC must be received before the news is publicized.

Sandia Laboratory ECP Drive to Benefit 33 Albuquerque Agencies This Year

Sandia Laboratory's fourth annual Employees Contribution Plan drive will be held Oct. 14, 17 and 18 with donations for 3 different welfare, health and youth service agencies in this area.

For the first time the Albuquerque Association for Mental Health will be included in the Sandia plan. In addition to the 24 agencies which comprise the United Fund, the following organizations will benefit from the Sandia Laboratory drive: American Cancer Society, Albuquerque Association for Retarded Children, Bernalillo County Heart Association, Cerebral Palsy Association of Bernalillo County, Muscular Dystrophy Association of America, National Arthritis and Rheumatism Foundation, National Multiple Sclerosis Society, and New Mexico Society for Crippled Children and Adults. In all cases the funds will go to local chapters of these health service organizations.

Method of conducting the drive will be similar to that followed in previous years, according to W. R. Rosenburg (4360), SLECP committee chairman.

Volunteer solicitors will contact employees in their own organization. Captains were selected this week and names of solicitors will be listed in the next issue of the Lab News.

Employees will be encouraged to make their contributions through the year 'round payroll deduction plan. This feature is available to those who contribute at least 25 cents a week or \$1 a month to the SLECP. Contributions of those currently giving by payroll deduction average \$23 on an annual basis.

The SLECP committee this year is comprised of: W. R. Rosenburg, chairman; M. D. Tucker (4131), treasurer; J. C. L. Leslie (3431-2), secretary; M. J. Sektnan (3431-2), coordinator; D. S. Tarbox (3200); Noble Johnson (3122); Ken Kerns (3425); J. W. Hook (4110); A. Y. Pope (7130); and union representatives John Ivey (3242), Janice Sharp (2642) and Harold Burrell (4224).



Crippled Children Society Pays Tribute To Sandia Employees

The New Mexico Society for Crippled Children and Adults has honored the Sandia Laboratory employees who, through the annual Employees Contribution Plan, have made donations to the organization.

The testimonial was presented to SLECP "in honor and with deep appreciation of the distinguished and unselfish service given to the Easter Seal Society."

The award was accepted by W. R. Rosenburg (4360) in his capacity as chairman of the SLECP committee. No Danger to Caverns

AEC Receives Further Word On Safety of Project Gnome

The AEC has received further assurance that there would be no damage to Carlsbad Caverns from Project Gnome, the proposed nuclear detonation 1200 ft. deep in a salt formation near Carlsbad, N. M.

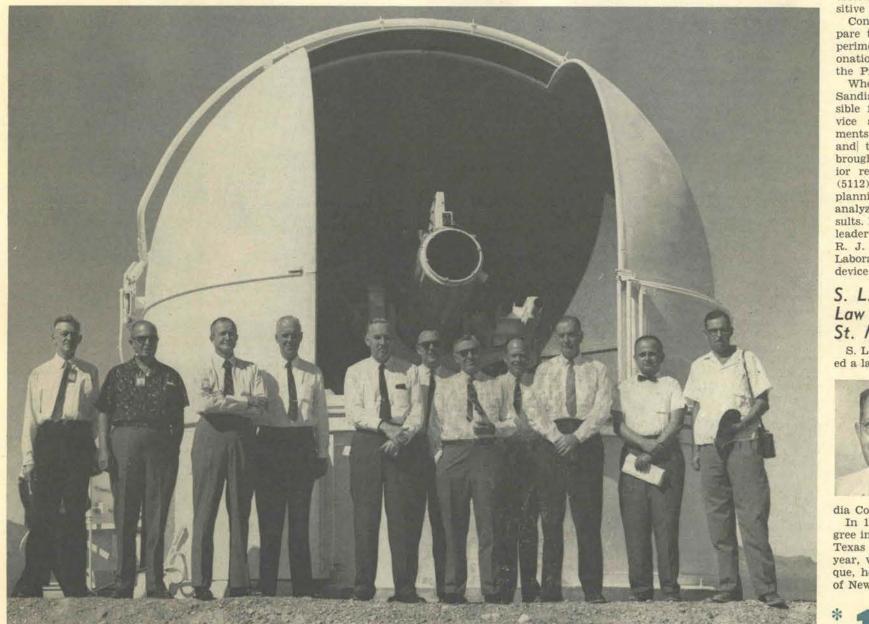
The AEC has already obtained reports from the U. S. Geological Survey and the U. S. Bureau of Mines to the effect that no damage would result to the Caverns from the experiment. The nearest point of the Caverns is 34 miles west of the Gnome site.

Dr. Nathan M. Newmark, a technical consultant for Gnome and a recognized authority in the field of seismic effects, prepared the latest report. He confirmed that natural earthquakes have repeatedly caused as great or greater stresses in the Caverns than would be caused by the 10 kiloton yield nuclear explosion and that seismic signals from the detonation would be so weak at the Caverns that they could not be detected except with extremely sensitive instruments.

Contracts have been let to prepare the Gnome site for the experiment, but there will be no detonation until it is authorized by the President.

When the test is carried out Sandia Corporation will be responsible for arming the nuclear device and for making measurements to determine ground motion and temperature. A. D. Thornbrough (7251-1) is Sandia's senior representative, W. R. Perret (5112) is scientific advisor for planning the experiment and for analyzing and reporting the results. E. S. Ames (7251) is project leader for instrumentation and R. J. Tockey (8123-2, Livermore Laboratory) is project leader for device arming and circuit safety.

S. L. Egger Earns Law Degree from



St. Mary's in Texas

S. L. Egger was recently awarded a law degree at St. Mary's Uni-

versity in San Antonio, Tex., and has passed the Texas bar examination.

Mr. Egger is supervisor of Surveillance Division M, 7536. He has been with San-

dia Corporation 10 years.

In 1937 he received his BS degree in electrical engineering from Texas A&M College and for one year, while assigned in Albuquerque, he studied at the University of New Mexico.

TRACKING CAMERA at Tonopah Test Range was a fitting backdrop for a photograph of the Sandia Corporation Board of Directors taken during a recent visit to the Nevada site. (L to R) W. L. Brown, Vice President and General Counsel, Western Electric; R. E. Poole, Vice President, Livermore Laboratory; J. B. Fisk, President, Bell Telephone Laboratories; P. R. Brousse, Vice President, Manufacturing Division, WE; H. I. Romnes, President, WE; R. W. Henderson, Vice President, Weapon Programs; R. L. Helmreich, Vice President and General Manager, BTL; G. A. Fowler, Vice President, Development; S. P_{SF} Schwartz, President; D. B. Shuster, Director of Field Testing, and A. Y. Pope, Manager, Engineering Dept. 7130. The Board visited the new range for one day.



Editorial—

Man's Carelessness

It's the most gruesome highway in the world.

LAB NEWS

It's 3,000 miles long. You'll find it here. In the country. In the city. It cuts a broad swath across the heart of America.

It represents the extent of man's carelessness,

- For the highway is bordered on one side by homes.
- And each house has been struck by fire.

Stretched out for 10 miles at the beginning are the dead lying head to foot.

Three hundred thousand homes damaged or destroyed! Eleven thousand three hundred dead in all fires!

Since time began? No. In a period of 12 months.

Will it be the same this year?

-International Association of Fire Chiefs

Coronado Club, Los Alamos Golf **Club Make Reciprocity Agreement**

Coronado Club members will be able to use facilities of the Los Alamos Golf Club as a result of an agreement between the two groups, the Coronado Club board of directors has announced. Los Alamos visitors will, in turn, have Coronado Club privileges.

Tickets for the Coronado Harvest Moon Ball on Saturday, Oct. 15. must be picked up at the club office by Wednesday, Oct. 12. The evening's activities will include a buffet from 6 to 8, entertainment at 8:30, and dancing from 9 to 1 to the MBC Trio. Cost is \$2.60 for members, \$3.60 for guests.

Live music will be featured at Social Hours every Friday night in October. There is dancing from 5 to 8 p.m., and a \$1.75 buffet is served from 6 to 7:30.

Arlen Asher will play for dancing tomorrow night from 9 to 1. Cost is 50 cents for members, \$1 for guests. A free recorded music dance will be held on Saturday, Oct. 8, from 9 to 1.

Time for Mr.-Mrs. Night on

S. P. Schwartz Speaks To 'U' Representatives Meeting at Sandia

Support and encouragement of atomic energy research and training at the university level will be the general aim of the University Relations Representatives meeting Oct. 10 and 11, at which Sandia Laboratory will be host.

The group is comprised of members from AEC laboratories and directors of the university associations which utilize research facilities at the atomic energy installations.

During the opening session S. P. Schwartz, President, Sandia Corporation, will present information on Sandia Laboratory and T. L. Popejoy, President of the University of New Mexico, will discuss the organization and objectives of the Associated Rocky Mountain Universities. D. J. Jenkins, manager of Sandia's Personnel Research, Training and Education Department, will be general chairTuesdays has been changed from 5:30-7 to 7-8:30. The "Two for One" time on Saturday night remains the same-6:30 to 8.

An all-day bridge session for the ladies on Oct. 12 will begin at 9:30 when coffee and rolls will be served. Play will be from 10 to 4 with time out for lunch in the club's cafeteria. Reservations should be made by Oct. 10 with Mrs. Schorr, AL 6-1363.

Two-Year-Old's Prize Find Gives Dad Creeps When Identity Learned

"Daddy, Daddy, look what I've got," cried two-year-old Debby, daughter of Bill Long (8121-3). It was a young snake, about 15 inches long, that Debby had picked up outside a Livermore bowling center.

Bill calmly ordered Debby to put the snake down, then told a bowling attendant a snake was in the driveway.

The attendant went out to remove it and came back a few minutes later remarking he hoped Bill's nerves were in good shape. The snake was a diamond-back rattler.

Scholarship Awarded

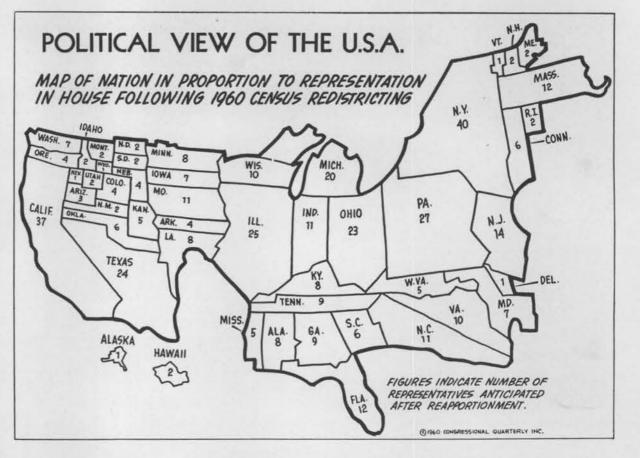
A scholarship fund, established in memory of M. J. Davis, Sandia Corporation technical editor who died June 12, has been awarded to Roy "Nick" Abdella of Albuquerque.

Nick is a senior in the University of New Mexico Fine Arts Department. The money will be allocated over two semesters, according to Bill Fears (5513-3), who manages the memorial fund.

Hold Scout Offices

A number of Sandians were recently named to offices on the Boy Scouts Kit Carson Council.

Glenn A. Fowler (7000) will serve as vice-chairman, William C. Clark (7315) will be district commissioner, and members at large will include: Wilson Maglidt (3460), J. C. L. Leslie (3431-2), Harlan Lenander (1300), W. M. Bacchus (1414), N. J. Eich (1127), R. M. Allan (3451), and Arthur Bullhorse (7312).



Weddings

Mr. and Mrs. Jerry Bellington are now at home at 1813 Carol NE following their recent mar-



Mrs. Bellington

riage. Mrs. Bellington is the former Sue Propst.

Sue has been at Sandia since March 1957 and works in Division 2561

Distorts Map of United States A political map-maker's projection of the United States, drawn up to show areas of popthree ulation and apportionment of congressional representation after

Population Apportionment

scheme of a mad draftsman. Illinois and Ohio, relatively small states with metropolitan settlements, occupy an elephant's share of the nation's mid-section. Large, sparsely populated states like Utah, Arizona, Nevada and Washington resemble small crumbs from a gigantic loaf, primarily composed of California.

the 1960 census, resembles the

Anticipated political reapportionment - increase or decrease of congressional representatives according to population growth and shifts - is based on advance reports by the United States Census Bureau in their comprehensive 10 year survey currently in progress. New assignments of congressional districts will affect the 1962 and 1964 elections.

Passing Pennsylvania and moving into second place behind New York, California's total delegation in the House of Representatives will probably increase by seven, to 37. It is forecast that first-place New York will lose three seats, dropping to 40.

Other states expected to gain new representatives are Arizona and Hawaii, with one each, Michigan and Texas, each gaining two seats, and Florida, advancing four seats.

Thirteen states are slated to

Jayne's Pleased

After Jayne Mansfield's recent arrival for the State Fair, Albuquerque newspapers mentioned that she was quite pleased with silver and turquoise jewelry sented to her and her husband at the airport. The donor was Robert L. Burgess (7213), whose hobby is making jewelry.

lose voices in the House. Like New York, Pennsylvania will have fewer office-holders. Arkansas and Massachusetts will each lose two men. And Alabama, Georgia, Iowa, Kansas, Maine, Minnesota, Mississippi, North Carolina and West Virginia will lose one congressional vote apiece.



man of the meeting

An afternoon exchange of information on undergraduate and graduate university education programs for laboratory employees will include discussion of Sandia's Technical Development Program and Educational Aids Program.

New Son

The M. J. Sektnan's (3431) have welcomed a new heir into their home. Little Mark Alan was born Aug. 24.

Ed Long Speaks

"Menace of the Communist Youth Movement in America" was discussed by Ed Long at a Kiwanis meeting yesterday. Ed is a member of the Security Education Section, 3231-2.

A. Y. Pope Speaks

Alan Y. Pope (7130) spoke on "Aerodynamic Research in Europe" before the Naval Ordnance Class at the Naval Reserve Training Center in Albuquerque Sept. 21

Lewis Wilson (1121) was a member of the council's nominating committee.

Congratulations

Congratulations are extended to Mr. and Mrs. A. Trujillo, Jr. (2643-1) on their new son, Ricky.

Ex POW's Sought

All former prisoners of war, either World War II or Korean conflict, are invited to attend meetings of the Bataan Veterans Organization. The meetings are held the second Tuesday of each month at 8 p.m. at the VFW post at 4510 Lomas NE.

For further information contact Clarence Ray (4516), ext. 43162.

Sympathy

To Mr. and Mrs. Vernon D. Peckham (1424) for the death of their infant daughter, Cathy Louise, on Sept. 17.

Congratulations

Laboratory for seven months

Mr. and Mrs. Fornaciari

R. M. Fornaciari were married

Aug. 28 in Pleasanton, Calif. The

wedding took place in the garden

Karen has been with Livermore

of her parents' home.

Karen L. Griffitts (8212-3) and

Born to:

Mr. and Mrs. Thomas Lehman (7312-2) a son, John Matthew, on Sept. 13.

Mr. and Mrs. Thomas V. Crawley (7221) a son, Jerald Matthew, on Sept. 13.

Mr. and Mrs. R. E. Church (2313) a son, Phillip Maguel, on Sept. 20.

Mr. and Mrs. Marlin A. Pound (8212-1) a daughter, Lori Elaine, on Sept. 6.

Mr. and Mrs. George Perkins (8234-1) a son, Brent Nolan, on Sept. 11.

Mr. and Mrs. Jay Schall a son, Thomas Jay, on Sept. 4. Kay is on leave from 8232-1.

Mr. and Mrs. Robert R. Beasley (7212-3) a son, Robert Douglas, on Sept. 17.

Mr. and Mrs. Marty Boyer (7212-3) a daughter, Marcel Ann, on Sept. 21.

Mr. and Mrs. Robert Leighninger (1424) a son, David Wayne, on Sept. 10.

Mr. and Mrs. K. J. Payne (2540) a son on Sept. 22.

One of his finely-crafted pieces of jewelry won third prize at the State Fair.

Take a Memo, Please

NO SAFETY DEVICE has yet been invented that can take the place of good judgement.



Office of Publication: Bldg. 829, Public Relations Division 3431, Sandia Laboratory, Albuquerque. Editor: Robert S. Gillespie. Associate Editor: Don E. Graham. Albuquerque staff: Cherry Lou Burns and June Leonard. Livermore staff: Richard A. Dickson and Robert J. Harks.

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SEPTEMBER 30, 1960



BANDAGED "VICTIM," Dave Dickie (8121-2), used the knowledge gained in his Livermore Laboratory first aid course to help out a real victim of a highway accident recently. He was a member of the

Livermore Softball

The Sandia softball team ended its season in second place in the Class A Livermore softball league championship after a mishap inactivated their star pitcher in the first of three playoff games.

The pitcher, team captain Jesse Oden (8225-1), was injured in the top of the eighth inning as the score remained tied one to one. The loss of the team's "right arm" lost them the game. Subsequently, since Jesse was unable to play again this season, the players voted to cancel out the other games, and consequently a try at the championship.

Members of the team were Jesse Floyd (8222-1), Ray Newton (8222-2), Bob Bryant (8225-1), Ken Riddle (8224-1), Don Gregson (8142), Ernie Alford (8223-3), Don Bohrer (8152-2), Dave Dean (8141-2), Tom Moore (8121-2), Bill Lovato (8232-4) and Jim Hyde (8116-1).

Seek Students for Shorthand Class

Women interested in attending a shorthand speed-building class to be held in Bldg. 880 are asked to contact Mary Williams (3132) at ext. 48138. A minimum of 10 persons is necessary to organize the class.

first class to take the course at Livermore Laboratory. Other classes are planned. Instructor Verne McNabney (8212-4) supervises the bandaging of pseudo-victim Dave by Paul Van Dyke (8123-3).

Red Cross First Aid Class Gives Dave Dickie Know-How in Crisis

Dave Dickie (8121-2) recently graduated from a pilot course in First Aid at Livermore Laboratory. A week later he was at the scene of a highway accident using his first aid knowledge to stop a victim's bleeding.

"I wouldn't have felt qualified to even stop at the accident without the knowledge the course gave me," said Dave, who didn't actually witness the crash, but arrived only minutes later.

The accident occurred halfway between Sacramento and Stockton on a Saturday evening. A sedan had crossed the freeway divider and plunged headon into a convertible traveling in the opposite direction.

Dave found the driver of the convertible in the worst shape; he was unconscious, lying on the front seat bleeding badly from a head wound near the left ear. Dave took his pulse, and applied direct pressure above the ear, stopping the bleeding. He avoided moving the victim remembering the first aid teaching "have a reason for everything you do."

Although there was eventually a crowd of about 100 people standing around, Dave was the only one giving first aid. "They all seemed willing to help," he said, "but none of them apparently knew what to do."

The first aid course began last July, A standard Red Cross course. it is taught by Verne McNabney (8212-4). The five-week instruction consists of two-hour weekly meetings. Graduates receive a card from the Red Cross, certifying their responsible ability.

Other members of the pilot class were Ruth Spence (8223-3), Trudy Martin (8212-4), Bill Reske (8121-2), Celso Vasquez (8225-3), Sidney Timmings (8222-2), Jim Perkowsky (8211-3), Paul Van Dyke (8123-3), Richard Lassen (8232-2), and Lowell Bayless (8225-1).

Future courses are open to all interested Livermore Laboratory personnel, who may sign up with the Medical and Safety Section (8212-4).

State Hunters Given Several Reminders By Game Officials

Hunting season opens in northern New Mexico Oct. 29, but hunters participating in the sport in any part of the state are reminded of several important laws.

All shotguns capable of holding more than three shells must be plugged with a one-piece metal or wooden filler incapable of being removed through the loading end of the shotgun.

It is unlawful to kill or shoot at any big game or game girds from any motor-driven vehicle or from any sailboat or floating device towed by a motor driven vehicle or by a sailboat. Hot pursuit

Livermore 'Fire-O-Rama' to Call Attention to Activities

Sandia Officials **Co-Chairmen** of Atomic Division

S. P. Schwartz, Sandia Corporation president and F. C. Childs, general attorney (6000), will serve as co-chairmen of the Atomic Division for the forthcoming Albuquerque United Fund campaign.

The fund drive is scheduled this year for Oct. 15-Nov. 15 with a goal of \$666,666-an increase of 39 per cent over last year's total contributions.

Mr. Schwartz has been a member of the Albuquerque Community Chest board of directors since 1959. The United Fund drive raises operating funds for the 24 member agencies of the Community Chest.

The major firms included in the division are: Sandia Corporation, AEC, ACF, Lytle Corporation, Ultradyne Inc., Carco Air Company, Sandia Base and Kirtland Air Force Base.

Sandia Laboratory employees, whose contribution plan includes several national health service agencies in addition to the Community Chest agencies, contribute 73% of their ECP fund to Albuquerque United Fund. Last year this amounted to about \$90,000, not including the Corporation's contribution.

Sandia Employees Invited to Join **Optimists** Club

A Sandia Base Optimists Club, open to military and civilian personnel, is being organized under the sponsorship of the Heights Optimists Club.

Main goal of Optimists Clubs is youth guidance. There are seven main clubs in Albuquerque and they sponsor the soap box derby, little league baseball, youth appreciation week, bicycle safety week and other activities.

Sandians interested in joining may contact J. H. Scott (7230), ext. 43274, and O. B. Tjeltweed (7146), ext. 43274.

Dr. I. M. Gross, past president of the Heights Optimists Club, may also be contacted at AM 8-8551 evenings or AL 6-4661 days.

A Fire-O-Rama will highlight observance of Fire Prevention Week at Livermore Laboratory. Posters, pamphlets, and at least one display in every building is also on the agenda, according to Verne McNabney, fire marshall in the Safety Section (8231-3).

During the half-hour Fire-O-Rama Oct. 12, Sandia fire teams will extinguish wood, paper, and trash fires, oil and gas fires, and electrical and chemical fires, demonstrating the method and effectiveness of various kinds of extinguishers. Small model structures will be set on fire and put out. One demonstration will show the effectiveness of fire resistant paint. Lawrence Radiation Laboratory will provide additional equipment to be used in the demonstrations.

The displays in Laboratory buildings will include fire-fighting equipment, breathing equipment, safety containers, pictures of fire teams at Livermore Laboratory, and pictures of fire damage to Sandia Corporation facilities in the past.

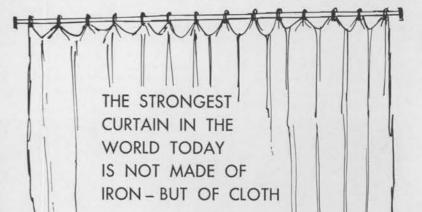
Livermore Laboratory has a total of six fire teams, one or more for every building. Each member of a six-man team is instructed in the use of the different types of extinguishers and the type of fire for which they are intended.

"We've had a good record in the past," said Verne, "and by continually stressing the importance of fire prevention we hope to keep the danger to a minimum."

Welcome

Newcomers Sept. 12-23

3001. 12-23	
Albuquerque *Josephine B. Canady *Donnie Fenstermacher *Shirley D. Kurth *Marjorie L. McDowell *Nancy J. Nelson Beatrice H. Olson Virginia L. Shortt Laura B. Stone Alice L. Whited	3120 4411 3120 3120 4413
Arizona Donald G. Dubbins, Tucson Illinois	
Joseph S. Kirk, Geneva New Mexico Doris C. Jackson, Los Alamos	
New York H. L. Glenn, Owego * Denotes rehired	2323
Joseph O. Connell	



Livermore United Crusade Getting Nearer to 1960 Goal

Contributions of Livermore from the 78.4 per cent of partici-Laboratory employees to the 1960 United Day Area Crusade Drive have reached \$8,947.78, Campaign Chairman Dick Cook (8116-4) has announced. Livermore Laboratory goal is \$12,000. Goal for the entire city of Livermore is \$40,000

pating employees. There were 816 employees solicited with an additional 82 absent employees to be contacted upon their return.

Last year Livermore Laboratory employees contributed \$9,360 to the United Crusade. Final results of the campaign are expected in

Average contribution is \$13.98 two weeks.



BABYSITTER for a horned toad named Hector, that's Peg Zumwalt (8233-1). Here they exchange loving looks. For two weeks Peg babysat for the lizard while owner Coralyn McGregor (8233-1) vacationed in Canada. Hector was given to Coralyn by Joe Vanderpoorten (8121-2), who found him at a nearby Livermore Laboratory test site. of any big game with or from any automatic vehicle, railroad car, or aircraft, is also prohibited.

Individuals desiring to hunt on private property must have prior permission from the owner.

Copies of the State of New Mexico 1960 Hunting Proclamation are available from Roseanne Bascom (3122-2) Bldg. 829, and from the Hunting and Fishing License Section, Office of the Provost Marshal on Sandia Base.

Sandians Author Paper For Presentation at Monterey Conference

G. W. McClure (5152) and K. D. Granzow (5152) are authors of a technical paper which is being submitted for presentation at the 13th annual Gaseous Electronics Conference next month in Monterey, Calif.

Title of the paper is "Ionic Avalanches in D_2 Gas at Very High Field Intensities."

IT'S THE "FREEDOM CURTAIN" BEHIND WHICH YOU VOTE. KEEP IT STRONG ... PAGE FOUR

SEPTEMBER 30, 1960



LAB NEWS

SAFETY CONTAINER for five gallon water jugs is shown here by Milton Guest (4513-4). Much of the work in design and construction of the wood and plastic wire containers was done by Mr. Guest, who has been a carpenter at Sandia for the last nine years.

Water Bottles Given 'Overcoats' of Wood, Plastic to Make 'Em Safer

Chalk up another victory for preventive safety. The target, in this instance, being five gallon glass bottles used as containers for distilled water and other liquids.

Members of the Safety Engineering Department became concerned with the safety hazard presented by the large breakable bottles. They turned to G. M. Austin and the men in his Boxmaking Section 4513-4 for a solution to the problem.

The result was a container of wood and plastic wire in which the bottle could be inserted. The container can be laid over on its side and rolled, thus minimizing chances of strains due to manual lifting and carrying of the filled bottles. Handles are attached to the top and the bottle can be used and refilled without removing it from the container.

In the event the bottle should break due to rough handling, theing functions.

plastic screen will prevent scattering of the broken glass.

Mr. Austin said, "The design of the container was the result of ideas submitted by my entire group.'

Dan Parsons Speaks At Dinner Meeting of Photographic Group

"Photography in Nuclear Weapons Research" was the title of a dinner meeting talk given by Dan Parsons (7224-1) at a Photographic Instrument Institute at the University of Wisconsin last week.

His presentation included colored slides and movies of shock wave and nuclear fireball studies.

The institute provided information on new photographic techniques with application in research, product design and development, testing and manufactur-

Supervisory Appointments

JOHN W. PEARCE to manager of Facilities and Instrumentation Department

7310

John worked

in environmen-

tal testing when

he first came

to Sandia in

March 1952.

Since February

1955 he has headed the Instrumentation Division in the Test Laboratory Department.

Prior to coming to Albuquerque he was with the Hoover Company in North Canton, Ohio, for six years as an engineer working on radio and acoustical noise problems.

Earlier he was in instructor for four years in the Ford Motor Company's aircraft school in Dearborn, Mich. He also taught chemistry and physics for two years at the LaPeer, Mich., public high school.

John received his BA degree in mathematics and education from Northern Michigan College and his MS in physics from the University of Michigan. He is a member of the Institute of Environmental Sciences.

Sandians Help Plan Southwest Reliability Training Course

Two Sandians are serving on committees for the Southwest Reliability Training Course to be held at Lake Texoma, Okla., Oct. 10 - 15.

L. J. Paddison, Director of Product Test Equipment Development, is on the Management Committee and J. M. Wiesen, supervisor of Statistics and Components Evaluation Division, is a member of the Program Committee. Both men are members of the American Society for Quality Control.

The course will present a combination of engineering, statistical and management techniques needed for an effective reliability program.

Lab Scientists Write Paper for Symposium

"Water Entry Testing Using Rocket Sleds" is the title of a technical paper written by D. W. Bauder (7313) and D. L. Krenz (7315).

The manuscript was prepared for presentation to the 29th Symposium on Shock, Vibration and Associated Environments which will be held in Oakland, Calif., on Nov. 15. 1960.

JAMES H. SCOTT to manager of Instrumentation Projects De-

and in the Pacific. The past three

years he has been connected with

FM/FM telemetry projects and

was assigned to Cape Canaveral

for a year.

Projects Division.

Jim has been at Sandia since 1954. During his first six years in fullscale field testing he participated in a number of nuclear tests in Nevada

partment 7230.

to supervisor of Project Section I, 2532-1, Manufacturing Development Systems Engineering Department.

RAYMOND E. HENDERSON

Ray has been at Sandia eight years, coming here from General Electric.

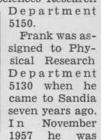
He joined GE in 1948 as a test engineer in the armament and ordnance division in Schenectady, N. Y. A year later he was transferred to the aircraft gas turbine division in Lockland, Ohio, as a shop engineer doing liaison with sub-contractors.

In 1951 he was promoted to supervisor of a shop engineering section within the parts manufacturing organization at GE.

Ray has a BS degree in mechanical engineering from the University of Arizona and is a member of Theta Tau, engineering honorary.

During World War II he served three years with the Army engineers.

ROBERT R. SOWELL to manager of Materials and Process De-



promoted to supervisor of Physical Chemistry Division 5151.

Prior to his employment here Frank was attending the University of Notre Dame where he received a PhD degree in physical chemistry. He also holds a BS degree in physics and a BS in chemistry from the University of Washington.

At the Naval Shipyards in Bremerton, Wash., Frank served an apprenticeship in structural steel work and later worked there as a structural engineer and electronics engineer. He was also a mechanical engineer for the Windelman Company in South Bend, Ind.

During World War II Frank served two years as an electronics technician in the Navy.

He is a member of Phi Beta Kappa, Sigma Xi, Zeta Mu Tau, the American Physical Society, the American Chemical Society and the Association for Applied Solar Energy.

partment I.

1110. This department is responsible for materials, plastic encapsulation, printed wiring, and explosives. Bob has been

at Sandia Laboratory 11 years and has been

concerned with organic materials development and prevention of fungus deterioration of materials. He was promoted to supervisor

of the Organic Chemistry Section in the Quality Assurance Organization in 1951 and to supervisor of the Organic Materials Division 1625 in November 1956.

He holds a BS degree from the University of Oklahoma and an MS in Zoology from Oregon State College. While at Oregon State College, he held a graduate assistantship and taught for one year on a teaching fellowship.

Mr. Sowell has presented papers in the fields of fungus prevention and organic materials.

HOWARD H. WICKE to supervisor of Applied Mathematics Di-



partment. During his six years at Sandia Howard has been working in Systems Analysis or Numerical Analy-

vision 5421,

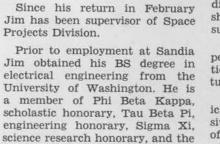
Mathematical

Research De-

sis fields.

He came to Sandia from Lehigh University where he taught mathematics for two years.

Earlier Howard received his BA



Institute of Radio Engineers. He attended an electronic technicians school during a year in the Navy.

FRANK P HUDSON to manager of Physical Sciences Research





FORTHCOMING SLECP drive to benefit 33 different health and welfare agencies was discussed at recent committee meeting. Those attending included (1 to r) M. D. Tucker (4131), T. B. Sherwin

(3431), M. J. Sektnan (3431-2) W. R. Rosenburg (4360), A. Y. Pope (7130), Janice Sharp (2642), L. L. Pierce (4224), J. C. L. Leslie (3431-2) standing, John Ivey (3242) and Kenneth Kerns (3425).

degree in philosophy, MA in logic and PhD degree in mathematics all from the State University of Iowa. He is a member of Sigma Xi, scientific honorary, Phi Beta Kappa, scholastic honorary, the American Mathematical Society, the Association for Computing Machinery, and the Mathematical Association of America.

He served three years in the Navy.

Review Course for Gregg Shorthand Will be Offered

A theory review course in Anniversary Gregg shorthand will be offered by Technical and Trades Training Division 3132 this fall if there is sufficient interest.

The class would meet during the noon hour.

Persons interested in such a course are asked to contact Mary Williams (3132) at ext. 48138.

Livermore Lab Bowling Trophies Awarded



SWEEPSTAKES WINNERS in the mixed league were (left, center) Ann Jenkins, wife of Bill Jenkins (8233-1), who scored first place for women with a 641 series; and (right, center) Jim Lovell (8122-3), who scored first place for men with a 645 series. Dave Timmer (8142-2), left, took third place for men, and Helen Huber, right, wife of Oren Huber (8115-1), took second place for women. Not in the photo were Chuck Newmyer (8162-1), who placed second, and Verla Darginis, wife of Joe Darginis (8115-1), third.



SALLY FORREST (8224-2), left, tied high scratch series in the women's league with Ruth Spivey, wife of L. M. Spivey (8164), not pictured, with a score of 498, and won the high handicap series with a 676. Dot Erickson, right, wife of Cliff Erickson (8114-2), shared the high handicap game score of 262 with Judy Bryant (8212-3), and Joyce Scott, wife of Allen Scott (8114-1).



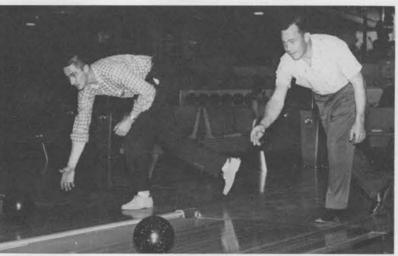
The summer bowling season ended at Livermore Laboratory with high honors for many Sandia bowlers.

Two Sandia leagues were formed during the summer, one a mixed handicap league, and the other a women's group, the "Sandia Stardust League." Employee Services (8212-2) provided first place trophies for both.

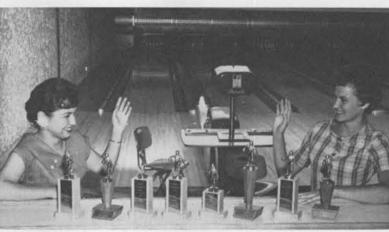
The winning team for the mixed handicap league was the "Sluff-Offs," whose members were Ted Peterson (8114-2), Mr. and Mrs. Harold Becker (8163-2), Jim Hyde (8116-1), Dick Cook (81164), Bill Reske (8121-2), Betty Juckeland (8121-1), Marie Ferrario, wife of Mike Ferrario(8114-1), and team captain Bob Eisele (8114-1).

The Stardust League's winning team consisted of Imogene Kelly (8212-1), Donna Short (8212-5), Estra Hill (8212-3), Sally Forrest (8224-2), Judy Bryant (8212-3), and team captain Ruth Powers (8212-5).

Individual high achievements in both leagues were awarded with trophies and honors. Sweepstakes bowling in both leagues provided additional opportunities for individual scores.



WINNING STYLE is demonstrated by Jim Olsen (8115-2), left, and Dick Cook (8116-4). Jim took high scratch game for the men in the mixed league bowling with a 255, while Dick took high handicap game with a 292. Charlie Comito (8114-1), not pictured, took both high scratch with a 609, and high handicap with a 705.



MOST AWARDS for the season went to Judy Bryant (8212-3), left, and Sarah Thomsen (8232-1). Each won three trophies in addition to their team trophy. Judy took high scratch game and high handicap game for the women's league, and the most improved average in the mixed league. Sarah took high scratch game, high scratch series, and high handicap series for women in mixed league.



Sandia Authors **Presenting Papers** At Tech Meetings

Sandians will be presenting technical papers at meetings during October.

Charles W. Jennings (1311-2) will present "Factors Affecting the Discharge Characteristics of Thermal Cells" at the Electrochemical Society meeting at Houston, Tex., Oct. 9-13.

Maynard Cowan (7511) will present "A Technique for Obtaining Particle Activity and Size Distributions" at Rochester University in New York Oct. 6.

On Oct. 13 Mr. Cowan will present the paper a second time at the Sixth Annual Meeting of the Bio-Assay and Analytical Chemistry Association at The Bishop's Lodge in Santa Fe.

At the same meeting J. E. Shreve, Jr., (7511) will present "Enigma of Laboratory vs. Field Exposures to Plutonium Oxide" and Kent C. Humpherys (5432-1) will present a paper entitled "Methods of Making Neutron Flux and Spectra Measurements in a Reactor."

A technical paper entitled "Grid Blackout in Vacuum Tubes" has been written by K. D. Hardin (1431-1).

The paper has been submitted for possible presentation at the 1960 Electron Devices Meeting, Institute of Radio Engineers, in Washington, D. C., on Oct. 27. Papers will be selected for publication after the meeting.

The Calendar

Oct. 3 American Ordnance Association, Albuquerque Post Western Skies Hotel Social Hour: 6:30 p.m. Dinner: 7:30 p.m. Speaker: Louis T. Polk, National President, American Ordnance Association; President, The Sheffield Corp. For reservations or more information contact J. C. Bain, AL 5-4486 Oct. 4 Instrument Society of America Place: Reeves Generating Station of Public Service Co. 7:30 p.m. Program: Tour of Public Service Company's Reeves Generating Station; Briefing will be given at the station's conference room of facilities instrumentation For more information contact James McCutcheon (1322), ext. 37167 Oct. 10 American Society for Quality Control Albuquerque National Bank Bldg., East Central Branch 7:30 p.m. Panel Discussion: What Price Reliability?— High Cost, Long Delivery, or Perfect Quality? For more information contact A. E. Clamp (7511-2), ext. 46138

Oct. 11 Society of Technical Writers and Publishers Reddy's Rendezvous 7:30 p.m. Speaker: D. J. Yarbrough (4420) Topic: "Generations and Release of Design Specifications and Standards For more information contact Don Emrick (2322), ext. 26137

Oct. 13 Oct. 13 American Welding Society Leonard's Restaurant 7 p.m. Speaker: Don Howard, ACF Industries, Chairman of AWS Committee on Missile and Rocket Fabrication Topic: "Welding in Missile and Rocket Fabrication" For more information contact

For more information contact Larry Null (1121), ext. 53234

This information compiled by the Council of Technical and Scientific Societies.

WINNING TEAM in the women's league was, from left, seated, Donna Short (8212-5), and Judy Bryant (8212-3), and, standing, Imogene Kelly (8212-1), and Sally Forrest (8224-2). Not present were Estra Hill (8212-3), and team captain Ruth Powers (8212-5).

FIRST PLACE sweepstakes winner in the women's league was Mary Vincent (8224-2), seated, who stole the show with a 642 series. Dee Mascaneras (8212-3), left, came in second with 636, and Gloria Yano (8232-1), right, was third with a 615. Gloria also achieved the most improved average for the league.

Golfers Play Tourney Then Celebrate With **Dinner Party**

Sandia golfers will hold their fall tournament at the University golf course Oct. 1. The tourney will be followed by a dinner party at the Coronado Club that evening.

Special feature of the tournament will be inter-flight playoffs which will determine the association's championship team for 1960.

At the dinner party in La Cana Room, trophies will be presented to flight winners and association champions, and prizes will be awarded to the tournament winners.

Cost of the dinner, which is for golfers and their wives, is \$2 per person.

During a recent match with the AEC, Sandia retained possession of the traveling trophy when they beat the AEC $47\frac{1}{2}$ to $21\frac{1}{2}$. This is the second consecutive year they have won the trophy.

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SEPTEMBER 30, 1960



LAB NEWS

... true security lies in the strength and freedom of our society

ENGRAVING TECHNIQUE by artist Ben Aiken (8232-5) produced this remarkable texture for the September security poster at Livermore Laboratory. Effects were obtained by closely interwoven lines.

Sandia Laboratory to Observe **1960 Fire Prevention Week**

"When Fire Prevention Week begins at Sandia Laboratory Oct. 9," Ted Rosenwald (4542-1), fire inspector, says, "we expect our fire loss record for the year will stand at \$205."

The figure represents the total damage of 12 minor fires which have occurred at Sandia since Jan. 4.

"While the actual cost is not much," Ted says, "the point is that any one of these minor fires could have developed into a major conflagration. It merely emphasizes once again that fire is a constant danger, a continuing hazard. All employees must be alert to the threat of fire and constantly work to prevent it."

National fire statistics, compiled from a 10-year average, are appalling. More than a million fires occur annually. Some 11,300 persons die every year while an untold number are seriously injured, burned or maimed for life.

Damage and destruction to property averages more than \$1,-275,000,000.

In 1959, fire struck nearly every 30 seconds, 3,000 times a day, every day.

the week broadcasting fire prevention messages.

"Heed the messages," Ted says, "not just during the week but every day of the year. Make a special project of inspecting your home and cleaning up your garage. Inspect your work areas regularly for fire hazards. Fire can happen any time, any place unless we work hard to prevent it.'

Two Sandia Scientists Participate in National Symposium in Denver

Two Sandians will participate in a national symposium of hyper velocity techniques to be sponsored by the Institute of Aero Space Sciences in Denver Oct. 20-21

Alan Y. Pope, manager of Engineering Department 7130, will be chairman of a session on hyper velocity wind tunnels and R. C. Maydew, supervisor of Experi-Aerodynamics Division mental 7132, will be a member of a panel discussing the same subject.

Sandia Women Help **Present Program of**

New Electronic **Artificial Larynx** Produced by WE

This week the Bell System introduced an instrument made at Western Electric's Indianapolis Works that will give a voice to those who cannot speak.

A new transistorized device, called the Western Electric Electronic Larynx, will help the thousands of persons in the U.S. whose larynxes have been removed or paralyzed and who have not mastered esophageal speech.

Western Electric's cost to manufacture-\$45-is also the cost to the customer.

Developed by Bell Telephone Laboratories, production started at Indianapolis on Aug. 17 and the first devices were shipped directly to Bell operating companies on Aug. 23. Although Indianapolis expects to make about 5000 this year, so many people have been awaiting the new device that initially it is available on a firstcome, first-served basis. Information can be obtained at any Bell Telephone business office.

Even though the electronic larynx is essentially trouble free, WE distributing houses will handle the repair of units. Repairs will also be on a non-profit basis.

Looking much like a modern electric shaver, the electronic larynx is held against the outside of the throat. Speech is produced by forming words with teeth, tongue and lips-just as in normal talking

The Bell System, in keeping with its long history of public service, has been aiding people affected by throat surgery or paralysis with a reed-type artificial larynx since 1926. The new electronic larynx is much improved over the earlier reed-type instrument, and is considerably better and less expensive than any other artificial larynx available today.



Fire Fighting Has Long, Exciting **History of Service in This Country**

It's a long leap from the bucket brigades of colonial days to the gleaming red fire engines of today. Yet the basic purpose remains the same-extinguish fires.

History of fire fighting in the United States goes back to Peter Stuyvesant, the doughty one-legged governor of New Amsterdam. On Nov. 14, 1647, he requested his advisers to counsel him on regulations for fires "which might break out here as in other places. It must be done with the least expense and danger to the community."

In 1648 fire wardens were appointed by him. Wooden chimneys were forbidden, on pain of penand householders were alties. fined 25 florins if fires occurred in their homes.

For many years the basic tools for fighting fires were the leather fire bucket and the manpower for the long lines of the bucket brigade.

First Fire Engine

The first fire engines were crude pumps carried to the scene of the fire by volunteers. Apparently the first engine to be built in the colonies was a machine that Abraham Bickley sold to Philadelphia for 50 pounds in 1718.

A fire in those days was a community crisis. Every able bodied man was a volunteer fire fighter and this was the established social order until the advent of professional, municipally controlled fire units in the 1850's.

In the last decade of the eighteenth century a French visitor to the United States reported, "The zeal and eagerness with which all Americans fight fires are admirable, but at the same time there are so many willing helpers and there is so little order that they do more harm than good . It is noticeable that in general the workers have too good a time, that the buckets are left in the streets after the fire, and that hoodlums amuse themselves with them."

In the 1800's some order was obtained when volunteer fire companies were formed. The pumps of the fire engines were steam powered and teams of horses were required to pull the wagons to the scene of the fire.

These volunteer fire companies had great rivalry in the larger cities and took great pride in their ability to fight fires and each other.

"Misunderstanding"

An item in the Reading, Pa., newspaper in 1847 reported "a

misunderstanding between a few of the members of the Junior Engine and Hope Hose Companies ended in a battered nose on the one part, and a black eye on the other."

In 1849, a fearsome volunteer smoke-eater named Moses Humphreys became the prototype of a character in a play called "A Glance at New York." The play was a tremendous hit but not everyone approved of the swaggering hero. One critic complained that "the effect of this character upon juveniles who visit the theatre is plainly visible, as they take every opportunity to imitate the pose, the pugnacity, the obvious toughness of this fireman."

Still, firefighting in those days was not for the light-of-heart. Most building construction was of wood and once a blaze started, flames and heat were intense.

Bravery of the volunteer firemen became the theme of a series of Currier and Ives lithographs produced in the 1850's. The series shows firemen battering down walls of flaming buildings, scaling rickety wooden ladders into a mass of flames to rescue women and children and salvaging property through walls of fire.

Professional Companies

The volunteer fire companies began to disappear with the advent of the first professional company formed in Providence, R. I., in 1854, but the trend took almost 50 years. Volunteer companies still exist today in smaller communities.

By 1900, too, the farsighted were seeing the end of the horsedrawn fire engines. In 1906, Wayne, Pa., acquired a gasolinedriven engine. The following year gasoline engines were simultaneously tried on fire apparatus in several communities. The New York Fire Department ordered its first motor equipment.

The development of a frontdrive motor, or tractor, proved to be highly successful. A completely self-contained two-wheeled engine was attached to old equipment that had been designed for horses, and until well into the 1920's the bulk of the nation's fire equipment was of this type.

Still, this was a far cry from modern firefighting equipment such as the three new gleaming red fire trucks of the Sandia Base Fire Department. Each one of these trucks, purchased last February, can pump 750 gallons per minute through four effective hose lines.

Purpose is still to put out fires.



At Sandia the most recent fire was on Sept. 1. A short circuit in the heater coil of an oil bath facility caused a blaze. Test apparatus was damaged and the cleanup cost of the smoke-filled and soot-covered room was \$75.

April was the "jinxed" month as far as the number of fires was concerned. During April, six small fires occurred at the Laboratory: from a cigaret in a wastebasket to a grass fire. The fires were small and did little damage.

"All of these could have been prevented," Ted says. "A little extra thought, a little care and the fires would never have occurred. This kind of carefulness and thoughtfulness should be automatic for us, both on the job and at home."

During Fire Prevention Week personnel of Inspection Section 4542-1 will be conducting a stepped up program of fire drills and inspections. Bulletin boards will display fire prevention postcards, literature will be distributed and a base fire truck will cruise the Tech Areas at intervals during

Secretaries Ass'n

The National Secretaries Association regional meeting, to be held in Albuquerque Sept. 30-Oct. 2, will have several Sandia women serving in official capacities.

Joanne Boyd (4600) is president of the local chapter and will deliver the opening day welcome. Edith Blum (4200) is general chairman for the regional meeting, Betty Pickel (4300) is registration chairman, Winifred Sandusky (6030) is banquet chairman, and Julia Sensel (AEC-ALOO) is chairman of the luncheon committee.

This region includes New Mexico. Arizona and California with approximately 200 secretaries expected to attend the meeting at Western Skies Hotel. Purpose of the gathering is to pass along information from the national convention held earlier this month. Panels and workshops will be held as well as a breakfast for Certified Professional Secretaries.

WIND TUNNEL MODELS of missiles to be used as regional meeting are examined by (1 to r) Julia

Sensel (AEC-ALOO), luncheon chairman, Edith decorations at National Secretaries Association Blum (4200), general chairman, and Joanne Boyd (4600), president of Albuquerque NSA chapter.

Sandia Service Awards

Lee Hollingsworth 8120

Oct. 2, 1950

Geraldine A. Hahn 2713 Oct. 3, 1950

10 Years

Ember L. Gunderson 2642 Oct. 3, 1950



James M. Miller 4621 Sept. 18, 1950



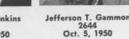


Walter F. Scott 7184 Oct. 2, 1950









Joseph M. Ralls 7524 Oct. 10, 1950

John Anaya 4233 Oct. 2, 1950

John H. Smelser 2451 Oct. 2, 1950

Guy H. Welsh, Jr. 4332 Oct. 10, 1950

Everett E. Ard 7511 Oct. 2, 1950

Myron W. Barnes 4151 Oct. 3, 1950



Fred B. Grey 4224 Oct. 11, 1950



E. C. Peterson 3220 Oct. 9, 1950



Robert J. Beyatte 7241 Oct. 13, 1950

David M. Wilkinson

4543

Oct. 3, 1950

Karl H. Zimmerm 1442 Oct. 9, 1950



0

Dale L. Peckumn 4511 Oct. 13, 1950

Julian Trujillo 4212 Oct. 13, 1950

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Sandia Personnel Helping 'Scooter' At Nevada Site

Excavation work is underway at the AEC's Nevada Test Site to prepare a chemical high-explosive (non-nuclear) charge of 500 tons for detonation in October.

The test, named "Scooter," was originally scheduled for July 14 but the charge failed to detonate at that time because of technical difficulties.

During the re-entry excavation work new detonators and a new booster charge are being placed near the center of the 500 tons of explosives.

The experiment is part of a series of high-explosive tests being conducted to obtain information on the cratering effects of explosives for the Plowshare Program of peaceful uses of nuclear explosives. From this experiment scientists hope to obtain additional information on the relationship between energy yield, depth of burial, and the crater size resulting from the explosion.

Test Group Director for the Scooter detonation is H. R. Mac-Dougall (7254), with W. R. Perret (5112) serving as his scientific advisor. F. B. Collins (7254) is representing Sandia Corporation in the re-entry operation. Arming and firing of the charge is being supervised by R. J. Burton (7254). Sandia Corporation also has employees working in six specific areas to be studied in the experiment: cratering characteristics, throw out distribution, particle trajectory, ground motion, closein air blast, and distant air blast (microbarograph) studies.

Five Years Oct. 1-14 Ina R. Brown 4622, Henry A. Mullin, Jr. 7124, Rupert H. McHarney 3463, L. Charlene Scott 4135, William C. Purchase 4361, Hilton B. Souther 2531, Emery A. Romine 8124, Thomas M. Oppelt 4412. John M. Reilly 4411, Howard R. Johnson 4514, Dorothy J. Cook 3151, Axel V. Peterson 8234, Helen T. Salazar 3423, Alex Padilla 4232, John P. Callahan 2644, Patricio R. Lerma 4573.

SHOPPING CENTER

CLASSIFIED ADVERTISING

Deadline: Friday noon prior to week of publication unless changed by holiday. RULES

1. Limit: 20 words

Edward Paul 2643 Oct. 10, 1950

- One ad per issue per person Must be submitted in writing 2.
- 3.
- Use home telephone numbers For Sandia Corporation and
- 5. AEC employees only
- No commercial ads, please
- 7. Include name and organization.

FOR SALE

- MARCHING DRUMS, concert snare and trap set; upright piano; radio ham gear. Hungate, AX 9-8302.
- ELECTRONIC FLASH, "Braun hobby auto-matic," guide No. for Kodachrome of 55, 105 watt seconds, \$50. Sawyer, 2900 Wisconsin Ave. NE, AX 9-5808.
- PLAY PEN and pad, \$9. Thompson, AM 8-2761 after 4:30 p.m.
- SPINET PIANO, Wurlitzer mahogany, or-iginally \$695, now \$400. Belmore, AX 9-5770 after 5 p.m.
- AOUARIUM, 15 gal., \$10; 17" TV-radio-

DINING TABLE, maple, extension leaves allow seating for 10, eight upholstered chairs, six years old, \$75. Jercinovic, AL 5-8027.

SHOPPING CENTER

- SPINET PIANO, Baldwin-Howard, with bench, one year old, \$755 new, will sell for \$575. Robnett, AX 9-9192. BLOCK PILASTERS, 50, six-inch, 20 cents each; FM-AM phono combination, all speeds, \$125; antique desk table, \$50. Rodgers, 6101 Mitchell Rd. SE, AM 8-1581
- AM 8-1581. CORONET with case, brass, American Prep, used one year, will sell for half price. McKiernan, AM 8-0516.
- WAGON WHEELS, large 55" diameter, 110 lbs. each, authentic for decorator use or utility, \$18 each; Ham receiver, Hallicrafter S-77A, broadcast to 40 mg, \$55. Bassett, AX 9-5685.
- CHEVROLET, Biscayne, 2-dr., 6 cyl., tu-tone, R&H, standard transmission. McKee, AX 8-1504.
- OUTBOARD MOTOR, 12 hp Wizard "Powermatic", \$85; ski boots size 8, skis, ski sweater, goggles, mittens—all for \$35. Moore, AX 9-2781.
- GOLF CART, \$25 new, used only five times, sell for \$12.50. Klingler, CH 7-8742.
- WALL FURNACES; two single, \$30 each; one double, \$50; one single and one double thermostatically controlled. Lardouble thermosta sen, AX 9-5406.

DEADLINE FOR SHOPPING CENTER ADS Thursday Noon, Oct. 6

SHOPPING CENTER

NEXT

Benjamin M. Cordova 4573 Oct. 12, 1950

- 2 BDR HOME with den, w/w carpeting in LR and hall, hardwood floors, just outside West gate, \$12,800. Young, 532 Florida SE, AL 5-8855.
- 270 WINCHESTER Model 70, \$85; beauti-ful new custom .308, \$70; several nice low cost rifles and pistols. Butler, 11009 Prospect, AX 9-5626.

YOUTH'S Skis, metal-edged, ridge top hickory, with high quality cable bind-ings, \$10; size 4 ski boots, like new, \$5. Sherwin, AL 5-8866.

SHOPPING CENTER

- BABY FURNITURE, used, six-year crib, stroller, Baby-Tenda Birdsall, AL 6-6225. table playpen.
- CERAMICS hobbiest gone overboard; sur-plus items would make lovely gifts for any occasion. Hansen, AL 6-6225.
- REAL ESTATE, one acre, high and dry, north Albuquerque, \$1,750, substan-tial down and balance terms, or best offer. Adams, AX 9-2126.
- '60 CHEVROLET Impala, 4-dr. hardtop sport sedan, Turboglide, power steer-ing and brakes, 13,000 miles, \$2450. Grubbs, AL 5-0172.
- VACUUM CLEANER, Lewyt, hose and cord, \$12; foot locker, \$3. Lewis, AL cord, \$ 5-3316.
- '51 RAMBLER wagon, R&H, OD, \$17 apartment-size gas range, \$7.50; Spe Queen ironer, \$45. McMurray, A S DECO. \$175 Queen 8-0529. AM
- 3 BDR HOUSE, corner lot, North Valley. Gonzales, 2225 Wilma Rd. NW, CH 3-0124.
 - 21" TV, blond, lowboy, radio-phonograph combination, \$99.95; Amana deep-freeze, 18 ft., \$225. Murray, DI 4-5289 after 5 p.m.
 - WATER PUMP, 4 in. Gorman-Rupp cen-trifugal w/Wisconsin mod. VF4 engine, \$200. Martin, CH 3-9484 after 8 a.m. Sat.

WOMAN to share 3 bdr. home. Glorya Maginnis, AX 9-0068 after 5 p.m. SHARE CAR pool, vicinity 2832 Dakota NE to Sandia. Glenn, AM 5-0647.

SHOPPING CENTER

- RIDE FROM Sproul Addition (3900 Hilton NE) to Gate 8. Candelaria, DI 4-6393.
- CHILDREN to care for in my home, ages 3-6, Monday through Saturday noon. Burgess, DI 4-6527.
- TYPEWRITER in good condition. Chadwick, AX 8-1298.
- SPANISH foreign language course records. Smith, AX 9-6873 after 5 p.m. on weekdays or anytime weekends.
- TWO PASSENGERS for dependable car-pool to Bldg. 802 from vicinity of San Mateo, San Pedro, Candelaria, Menaul. Westman, AL 5-6048.
- RIDERS from vicinity of 12th and Can-delaria to 880 parking lot. Lois Swearingen, ext. 53135.
- RIDERS. I live in Mossman-Gladden area and drive down either San Pedro or Louisiana to Sandia Corp. Ginger Powers, AX 9-9433 after 5 p.m.

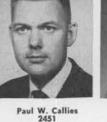
FOR RENT

- 3 BDR HOUSE, landscaped, walls, patio, stove, refrigerator, \$90. Jeffers, 8112 Southern SE, AX 9-8124.
- 2 BDR HOUSE, furnished, airconditioned, carpets, carport, city water and lights paid, 3400 Cypress Dr. SW. Fay, UL 5-9933.

- SKIL SAW, sabre saw, chain saw, drill press, sheet metal brake production table for drill press, misc. tools. Pliner, 6210 Bellamah NE, AL 6-1907.
- DEER RIFLE, 6.5 x 55 Krag, custom stock w/recoil pad, \$40; 12 ga. M37 Win-chester shotgun, \$25. Bauder, AX 9-7322.
- DINETTE SET; high chair; oak bookcase; 1958 Fairlane 500, loaded, includes air conditioning, sell for book value. Pres-ton, 2921 Nevada NE, AX 9-1948.
- MOSSMAN 3 bdr., carpeting, drapes, air conditioned, landscoped, patio, fire-place. Bliss, 2825 Cardenas Dr. NE, AM 8-4837.
- FUR CAPE, clutch type, squirrel, \$50. Hart, AX 9-1166.

Ivan W. Marshall 7253 Robert S. Lemm 4230 Oct. 2, 1950 Oct. 2, 1950





Oct. 4, 1950

Robert G. Fleming 4231 Oct. 4, 1950

Arlin D. Pepmueller 8233

Oct. 2, 1950



Stanley Brooks 4573 Oct. 10, 1950

record	player	combination,	make offer.	
Cervant	tes, AL	5-5670 after	5:30 p.m.	

- KENMORE IRONER; Pan American trum-pet; 16" wheels complete with tires. Olson, AM 8-5312.
- '58 VAUXHALL, 4-dr., R&H, ww tires, \$1050; blue formal, floor length, size 12, worn once, reasonably priced. Law-will, AM 8-6453.
- ELECTRIC TRAINS, 50' 3-rail track, 10 cars, locomotive, diesel engine, RR crossing, station, \$65; bookcase train-table combination. Rector, 3508 Espejo NE, AX 9-9164.
- '54 LAMBRETTA motor scooter. Ruff, AM 8-9969.
- LOT for sale or rent, 165' x 83'; 14' boat and trailer for sale. Lathrop, 1341 Santa Rosa SW, CH 7-3882.
- '60 SUPER EAGLE scooter with accessories, six months old. Kleindienst, AX 9-8792.
- '55 CHEVROLET convertible, V-8, power-glide, good motor, top and tires, Con-tinental kit. Chandler, DI 4-6609.
- ELKHART TRUMPET, one year old, \$100. Smith, AL 5-6478.
- ELECTRIC RANGE, fully automatic with center grill 36" x 25" x 40", \$125; near new 2 hp quater midget racer and trailer. Fay, UL 5-9933.
- '53 FORD 2-dr. sedan, R&H, beige color, \$395. Amador, 1229 Forrester NW, CH 2-2080.
- SIESTA LOUNGE, gold and brown color converts to 3/4 bed, \$35. Cannon, AX 9-4994 after 5 p.m.
- TIRE CHAINS, 6.70 x 15, \$8. Croig, AX 8-1215.

303 CARBINE, \$20, with case and shells, \$25; vacuum cleaner, Filter Queen, \$15, Everett, AX 9-6057.

- ELECTRIC STOVE, Leonard, almost new, \$150. Glenn, AM 5-0647.
- 21" TV, Wilcox Gay, mahogany veneer console, works well all channels, \$65. Butler, AL 5-8503 after 5 p.m.
- '53 FORD Country Squire station wagon; oil and water paintings; 12 gauge shot-gun, Winchester Model 12. Otero, AL gun, W 6-6597.
- ENCYCLOPEDIA (Colliers), up to date 1960, 22 volumes, \$100. Wakeland, AX 9-2519.
- '55 CHEVROLET 210, 4-dr., automatic transmission, Solex glass, new tires, \$695. Drake, AX 9-0743.
- DOG HOUSE, attractive, durable, insulated, \$10. Esterly, AL 6-9251.
- BDR house, 134 baths, covered patio, central heat, AC, dishwasher, disposal, water softener, landscaped, sprinklers, extras, \$600 down. Sublett, 1805 Tru-man NE, AL 5-0660.
- TIRES, two winter tread Firestone recaps, size 7:10 x 15, \$5 each. Evans, 8012 Fruit NE, AM 8-7039.
- '60 RAMBLER American station wagon, 7500 miles, \$1885; new SX-100 receiver, \$250. Drummond, AL 6-0144.
- JEEP, CJ5, 1959, with 4-wheel drive, less than 4,000 miles. Johnson, AX 9-0006 after 5 p.m.
- AQUARIUMS, complete unit, 20 gal. and 5 gal., stand, filters, reflectors, heaters, pump and fish, \$40. Haines, AX 9-4117.
- DINETTE SET, four chairs, bronze tone. Heineman, AL 6-6387.

- '57 CORVETTE, big engine with twin 4-barrel carburetor, rebuilt engine, 3-speed standard trans. Will consider trade-in. Hunter, AX 8-0439 after 5:30 p.m.
- MOUNTAIN LOT, approx. ½ acre in Crest-wood Manor located seven miles south on Highway 10, \$700. Sanchez, CH 2-4556.
- 21" TV Emerson, console model with casters, mahogany veneer cabinet, \$75. Stark, 1334 Marron Circle NE.
- '50 PLYMOUTH, 4-dr., \$250. See at 1413 Georgia NE. Myers, AL 6-0468.
- '55 FORD Ranchwagon, manual shift, '57 T-bird motor, R&H, \$625. Mastin, BU 2-3489.
- ROOM modern home with one acre at Sun Valley Acres, 17 miles south on Highway 47, \$15,500, \$750 down. Skelley, Rt. 1, Box 618, Albuquerque.
- END TABLES, \$12 each, bookcase \$17, all Heywood-Wakefield; red alligator 2 ft. table lamps, \$5 each; 21" Zenith TV comb. table-console, ebony, \$75. Brown-ing, AX 9-6384 after 5 p.m.
- BOYS 26" Schwinn bicycle, new paint, tires; girl's 26" bicycle. Make offer. Spatz, girl's 26" bicycle. Make offer 2002 Inez Dr. NE, AX 9-0410.
- HORSE TRAILER, single; double horse trailer. Must sell, reasonable for cash or will trade. Causey, AX 9-0089.
- REMINGTON 722 caliber .257, \$65; Win-chester 43 caliber .22 hornet, \$45. Adams, 2819 Carolina NE, AM 8-5943.
- 3 BRM HOME, near Sandia Base, lawn, air-condtioned, stove, cement drive, full insulation, \$11,250, \$500 down, terms. Leslie, AX 8-2178.

- FIREPLACE gas log, looks like real wood log, half price. Perea, 720 Amherst NE, AM 5-0861.
- 7.10x15 TIRES, white wall nylon with tubes, some tread, no breaks or re-pairs, \$4 each, three only. Holmes, 2705 Wisconsin NE, AX 9-4167.
- 3 BDR AND DEN, 2 baths, garage, elec-tric range, disposal, drapes, air con-ditioner, near Highland High, \$13,900 with terms. Eagan, AX 8-0196.
- HOLLYWOOD BED w/innerspring mattress; deerhunters special—'53 Chevrolet sta-tion wagon. Gregory, AX 9-2461.
- CUSHMAN SCOOTER, recently completely overhauled, windshield, \$95. Gross, 1208 Florida NE, AL 5-7327.
- '51 OLDSMOBILE, \$150 or best offer; equity in one or two acres in Corrales, level, on ditch. Trujillo, CH 2-3827.

WANTED

- RIDE from Menaul and Espanola to south parking lot of Tech Area I. Kleindienst, AX 9-8792.
- RIDE from 308 Wilshire Dr. SW to Bldg. 887, second shift. Emilia Vigil, CH 3-0668.
- HOME FOR four small kittens, weaned one week. Harrington, BU 2-3114.
- RIDE TO Sandia Corp. from vicinity of 513 Aztec NW. Lopez, DI 4-6975.
- RUMMAGE ITEMS for "PALS" to raise money for Los Lunas Hospital and Train-ing School. Abeyta, AL 5-3262 or AL ing Sch 5-5369.
- SHARE RIDE to 11 o'clock UNM class, Monday, Wednesday and Friday. Wam-bold, AM 8-0275.

- 4 BDR HOUSE, 1½ baths, NE heights, walled yard, convenient to Catholic and public schools, shopping area. Under-wood, AL 5-7547.
- BDR APT., stove, refrigerator, air con-ditioned, water and garbage paid, 528 Cardenas SE. Tillman, Apt. A, call AL 5-6292 after 5 p.m.
- SHARE a 3 bdr. home in Inez Addition, \$55 per month. Waters, AX 9-2760.

LOST AND FOUND

- LOST—Man's gold ring engraved with initials J.F.S., heirloom. Schofield, 701 Wellesley Dr. SE, AM 8-0956.
- LOST-Gold lapel watch; 5x9 grey ledger; keys willowa State travel ID; glass case w/name Vertiz; keys with blue tag marked Rose; silver lighter w/Louann; King optical glass case; brown framed glasses; turquoise drop earring. Lost and Found, ext. 26149.
- FOUND—Earpiece from glasses; brown frame glasses; brown knit glove; 6½x4½ black notebook; glasses with brown plastic frames. Lost and Found, ext. 26149.

FOR SALE AT LIVERMORE

- FISHING BOAT, 15 ft., cabin, \$40. Bow-man, HI 7-5537.
- '58 WHIRLPOOL washer-dryer, \$300; maple double bed, 3-drawer chest, \$100; dinette set, \$35; platform rocker, \$30; garden tiller, \$75. Hewitt, ext. 2328. \$30;
- FREE KITTENS, three, grey and white, black and white. Foster, ext. 2423.

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LAB NEWS

Demonstrates law of physics **SEPTEMBER 30, 1960**



CHARLES C. CAMPBELL, manager, AEC-Sandia Area Office, and A. H. Mayginnes (right), financial management analyst, discuss the significance of the miniature security flag. It acts as a security barometer; flying at full mast it symbolizes a day free of security infractions. Sept. 19 it had flown at full mast two consecutive years.

Allocation of ECP Funds Is **Announced by Committee**

Contribution Plan committee has announced percentage allocation for the 33 agencies participating in the fourth annual drive.

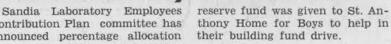
The division of funds to be raised in the coming SLECP campaign is:

United Fund

CHITCH A MARK	
(24 agencies)	13.0%
Cancer Society	7.1%
Heart Association	
Crippled Children	
Cerebral Palsy	3.0%
Arthritis & Rheumatism	1.7%
Retarded Children	1.6%
Muscular Dystrophy	1.3%
Mental Health	1.0%
Multiple Sclerosis	
Reserve Fund	1.0%

The percentage allocation is based on the past record of the participating agencies in raising money in the community. The figures fluctuate slightly from year to year but are basically the same as last year.

The reserve fund, if unused at the end of the year, is presented to the agency or agencies deemed most in need of the additional funds. Last year the emergency fund was given to the United Fund when that organization fell short in its yearly campaign. The previous year the money in the tery manufacturing company.



W. M. Evans Retires Today from Sandia

W. M. "Bill" Evans (7523) will retire today after nearly nine

years with Sandia Corporation. He is an electro - chemical engineer.

> Mr. Evans and his wife plan to move to Longmont, Colo., where their two sons

live. The fine trout fishing in the Colorado mountains is also a reason for settling there.

Next summer they will spend several months abroad, touring Rome and visiting the places of historical or Biblical importance in Egypt.

Mr. Evans received his degree as a mining engineer from the School of Mines of South Wales in 1924 and two years later came to the United States. In 1937 he moved to Colorado and worked in the mines there for several years before establishing his own bat-

Albuquerque Rotary Club Will Tour Sandia Laboratory Facilities

Approximately 200 Albuquerque and S. P. Schwartz, President, Rotarians will tour Sandia Base on Oct. 13 under the joint sponsorship of Sandia Corporation, the AEC and the Military.

Charles C. Campbell, manager, Sandia Area Office, AEC, is October program chairman for the Rotary Club and is coordinating

Sandia Corporation.

K. F. Hertford, manager, AEC-ALO, will summarize the briefings and explain the relationship of the various groups to each other. The Rotarians will then take a 20 minute bus tour of Sandia Base, and end up at the Sandia

Pendulum Swing in Sandia's Science Sphere Fascinates Many

Suspended on a 43-ft. steel cable from the top of Sandia's Sphere of Science is a 350-lb. metal ball. This device, called a Foucault pendulum, has been fascinating groups of students and visitors who have visited the geodesic dome the past few months.

The pendulum swings slowly back and forth above a large ceramic polar view of the earth. Included on the ceramic map are directional lines.

Over a period of about an hour or more, it appears that the swing of the pendulum has changed because it is no longer tracing the same path above the directional lines.

This is not true; the earth has moved and the swing of the pendulum has remained true to its original path.

This visual demonstration of the rotation of the earth about its axis was first performed by Leon Foucault, a French physicist, in Paris in 1851. All free-swinging pendulums maintain the constant direction of motion imparted by the starting force regardless of any movement by the support.

John C. L. Leslie is supervisor of the Community Relations Section which is responsible for the Sandia Sphere of Science.

Describes Action

John describes the action of the Foucault pendlum thus:

"Imagine you are looking downward on the earth from directly above the North Pole. You would see the Earth turning counterclockwise. Now imagine you are standing at the North Pole watching a pendulum (which does not rotate with the earth) swing over the surface of the earth.

"You would see the path of the pendulum appear to drift to the right-or clockwise. If you were standing at the equator watching the same device it would not appear to drift at all. This is because a pendulum swinging over the equator is traveling with the earth as the earth rotates.

"Here at Albuquerque the apparent rotation is not so great as at the pole but it is still easily discernible.

"In the Northern Hemisphere the degree of apparent clockwise movement varies from the maximum of 15° per hour at the North Pole to 0° at the equator. The pendulum at Sandia has the apparent rotation of 8.164° per hour. In Albuquerque a complete revolution of the pendulum takes 41 hours and 47 minutes.'

Science Exhibits

Displays such as this demonstrate graphically basic laws of physics or scientific phenomena.

Mountain Club Plans Varied Program for **Coming Two Weeks**



DISPLAYED in Sandia's Sphere of Science is this Foucault Pendulum which swings over a large ceramic polar view of earth. By comparing the path of the pendulum against the guide lines, rotation of the earth on its axis is visible within a period of time. At top are members of the Community Relations Section 3421-2 responsible for the operation of the exhibit. From left are Bert Dieruf, John Leslie, section supervisor, and Marv Sektnan.

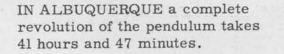
They are included with the Sandia science exhibits for the purpose of stimulating interest in scientific fields.

The dome has been at two New Mexico State fairs where it drew over 10,000 visitors daily. Most recently it was open during Armed Forces Day in connection with Sandia Base exhibits.

The Sphere of Science is also available to any organized student group, service club or technical organization by making arrangements for a visit with the Community Relations Section of the Public Relations Division 3431. Interested persons may contact Mr. Leslie, ext. 44264.

Groups of employees who wish to visit the dome during the noon hour or after hours are also invited to do so.

Contact Mr. Leslie or someone in the Community Relations Section for information on hours of operation for the Sphere of Science.



NORTH POLE

arrangements for the program.

Following a luncheon at the Sandia Base Officers' Club, briefings of operational responsibilities will be given by the heads of the host groups on Sandia Base. These include Col. Harry Balish, Sandia Base Commanding Officer; Col. Benjamin F. Witsell, Manzano Base Commanding Officer; Gen. H. C. Donnelly, Commander, Field Command, DASA,

Lab "Sphere of Science" for a tour of the science exhibits in that building. While there they will also see a 10-minute documentary movie of unclassified technical activities at Sandia Laboratory.

The visiting group will complete the afternoon's activities with a tour of Area III facilities.

Public Relations Division, 3431, is coordinating Sandia Corporation's part of the activity.

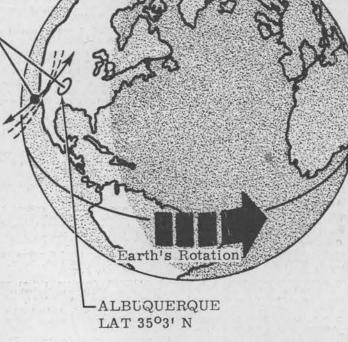
A hike, a rock climb and a steak fry is the varied program offered by the New Mexico Mountain Club during the coming two weeks

Tomorrow night members and guests will take it easy and enjoy beef a la campfire.

Sunday, Oct. 2, Zelma Beisinger (5126) will lead a climb up the Prow, a massive pinnacle that stands alone on the upper slopes of Juan Tabo bowl away from the." main Sandia escarpment.

The following Sunday members and guests will hike up the old wagon road in Peralta Canyon in the Jemez Mountains. The group will eat lunch at a tunnel-like natural bridge which spans the narrow, wooded canyon.

Both Sunday trips start at Nob Hill at 8 a.m.



PATH of a pendulum swinging in Albuquerque has an apparent shift to the right, or rotation, of 8.164 degrees within an hour.

Sandia's Safety Record Sandia Livermore Laboratory Laboratory See article on Page One about Sandia Laboratory safety record.

HAS WORKED 3,778,000 MAN HOURS **OR 1,685 DAYS** WITHOUT A DISABLING INJURY